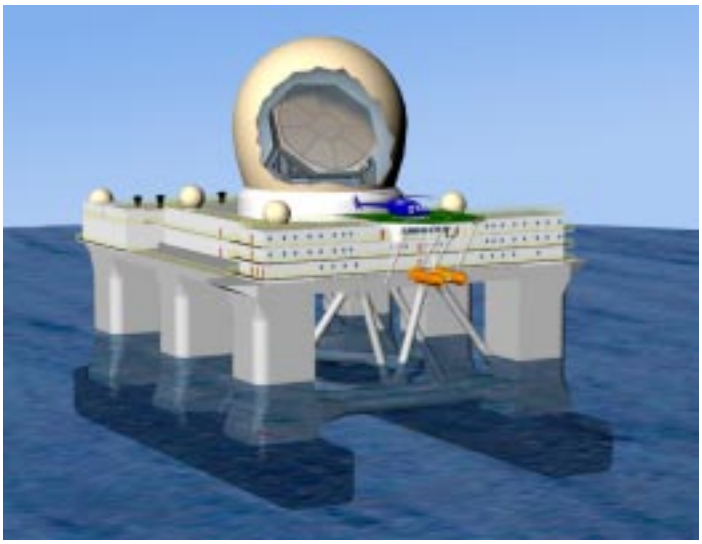
MISSILE DEFENSE AGENCY
MDA In-depth
Making Ballistic Missile Defense A Reality...

# Sea-Based X-Band Radar (SBX)

The Missile Defense Agency (MDA) plans to conduct more operationally realistic testing of the Ground-Based Midcourse Defense (GMD) element of the overall Ballistic Missile Defense System (BMDS). Included as part of this test program is the development and construction of a Sea-Based X-Band Radar (SBX) that will track, discriminate, and assess incoming target missiles.



The SBX will provide enhanced capability to support more challenging test scenarios. By utilizing a floating platform, the X-Band radar can operate at the best location for different and varied test scenarios, whereas a fixed location for the X-Band radar would limit both performance potential and support to the GMD tests.

SBX will consist of a large X-Band radar mounted on a modified fifth-generation semi-submersible platform with Battle Management Command Control and Communications, which will include In-flight Interceptor Communication System Data Terminals and associated communications; power generation; facility floor space; and infrastructure, similar to a fixed radar installation. The platform will be approximately 390 feet long, with a 238-foot beam, and an operations draft of approximately 75 feet. The height from water surface to the top of the radar dome will be 250 feet. The deck area will be approximately 270 x 230 feet.

The initial sea trials will take place in the Gulf of Mexico to ensure maneuverability and control of the vessel. In addition, the sea trials may include full power operation for satellite and calibration device tracking. Following the sea trials, the completed platform will transit from the Gulf of Mexico to its primary support base at Adak, Alaska.

SBX will perform tracking, discrimination, and assessment of target missiles in support of missile defense tests, as well as, operation of the GMD system.

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